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Recent Trends in Soviet Oil Exports

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An Intelligence Assessment

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November 1982

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An Intelligence Assessment

This assessment was prepared by [redacted] the Soviet Trade Branch, Office of Soviet Analysis. It has been coordinated with the National Intelligence Council. Comments and queries are welcome and may be directed to the Chief, Soviet Economy Division, SOVA [redacted]

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Key Judgments

Information available as of 1 November 1982 was used in this report.

Despite a weakening international oil market and lower prices for Soviet petroleum in the West, the USSR achieved a dramatic turnaround in its oil exports through the first half of 1982. Two-thirds of the $4 billion trade improvement in the period January-June 1982 compared with the same period in 1981 was due to stepped-up hard currency oil exports. The volume of oil shipped to hard currency OECD (Organization for Economic Cooperation and Development) countries in the first six months was more than 50 percent above the first-half 1981 level. To provide the incremental exports, Moscow had to cut back allocations to Eastern Europe and the Soviet economy. 25X1

Several factors probably supported the Soviet decision to push oil exports so hard over the past 12 months. Moscow needed to correct quickly a soaring trade deficit; except for gold, oil was the only commodity that could be readily diverted to the hard currency market. The USSR also needed to build up working capital in Western banks, which had been all but depleted in early 1981. Finally, Soviet uncertainty over access to new Western credits probably was high in the wake of the imposition of martial law in Poland and discussions in the West over possible credit restrictions.

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The ability to maintain revenues by increasing the volume of sales during a period of soft prices represents a substantial change for Moscow. In the late 1970s rising oil revenues resulted exclusively from skyrocketing world oil prices. In the 1978-81 period, for example, revenues from sales to hard currency customers rose from $5.7 billion to $12.2 billion even though the volume of deliveries fell 16 percent. Deliveries of 975,000 barrels per day (b/d) of crude oil and oil products earned $12.3 billion in hard currency in 1980, while sales of 920,000 b/d in 1981 earned $12.2 billion. If the first-half-1982 pace were to be maintained in the second half of 1982, Moscow's earnings from the sale of crude oil and oil products would reach a record $14 billion, almost $2 billion higher than in each of the two previous years.

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Despite the strong oil export performance so far this year, factors outside of Moscow's immediate control—the effect of weak Western demand and surplus OPEC oil production on world prices—are likely to diminish the

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USSR's chances of maintaining its oil revenues at recent levels over the next few years. In addition, we believe that the USSR will be unable to maintain the present volume of deliveries to hard currency markets because Soviet oil production is unlikely to keep pace with domestic demand. In late 1981, the Soviets adjusted to a downturn in sales by diverting oil scheduled for 1982 delivery from soft currency countries in Eastern Europe to hard currency customers. Later, the domestic economy took some of the blow. Hence, the ability of either Eastern Europe or Soviet consumers to absorb further cuts is one of the critical factors determining the level to which oil revenues will fall. 25X1

Even though reducing the large oil deliveries to Eastern Europe is the easiest way to stretch dwindling supplies of exportable petroleum, the Soviets might consider other actions to maintain hard currency oil earnings, such as cutting back exports to non-Communist soft currency customers like India or Finland and increasing the share of oil products (instead of less expensive crude oil) in deliveries. We do not believe, however, that any of these alternatives will enable the USSR to forestall a long-term decline in the volume of petroleum available for hard currency sales. 25X1

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Introduction

The USSR is the world's leading petroleum producer and is second only to Saudi Arabia as an oil exporter. Although the Soviets allocate only about 8 percent of their annual oil production to hard currency markets, the USSR's balance of payments is tied closely to the international oil market. In 1981 oil exports accounted for 50 percent of Moscow's hard currency earnings from merchandise trade and roughly 40 percent of all its foreign exchange receipts. Information on oil sales is therefore crucial to understanding the Soviet hard currency balance of payments.

This assessment examines recent trends in Moscow's oil trade and the adjustments that are being made to balance domestic availability with international demand. It concludes with a discussion of the choices the leadership will have to consider if policy is aimed at maintaining oil exports as a major hard currency earner. Because our ability to monitor oil exports has been complicated by the Soviet decision to stop reporting volume data in official trade statistics beginning in 1977, we have had to estimate the volume in recent years from a variety of data. How we estimate the volumes and values of oil exports—the statistical underpinning of this analysis—is explained in appendix A.

The Role of Oil in Soviet Foreign Trade

Sales of crude oil and oil products emerged in the 1970s as the USSR's leading export earner. During the decade, Soviet petroleum exports grew from about one-tenth to more than one-third of total merchandise exports. The record of growth has been even more spectacular from a hard currency standpoint. Oil sales rose from less than one-fifth of hard currency merchandise exports to one-half during that 10-year span. In value terms, they climbed from $400 million at the beginning of the 1970s to $3.2 billion at mid-decade and to over $12 billion in each of the last two years. While the volume of oil sold increased by 30 percent from 1971 to 1981, the spectacular runup in oil prices—a roughly fifteenfold increase—provided the biggest boost to Soviet earnings of hard currency (figure 1).

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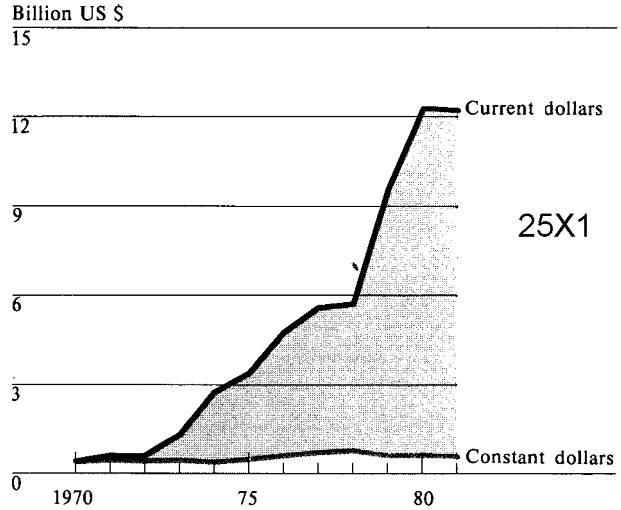
Figure 1
USSR: Petroleum Exports to Hard Currency Countries



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The pattern of Soviet oil exports was fairly stable throughout the period, with Moscow consistently marketing from 1.5 to 2 times as much oil to the

Communist countries as to hard currency countries. Because of the substantial price concessions that Moscow offers to its Communist clients, however, those sales in value terms roughly equaled sales to hard currency Western customers.

The Export Balance in 1980 and 1981

The USSR produced on average nearly 12.2 million barrels per day of crude oil in 1981—150,000 b/d (or about 1 percent) more than in 1980. Because apparent domestic oil consumption rose, even with a slowdown in economic growth, Soviet oil exports did not exceed the 1980 volume. Overall sales in both years were close to 3,265,000 b/d. Soviet petroleum deliveries to Communist countries were virtually unchanged between 1980 and 1981, and deliveries to other soft currency customers grew by less than 3 percent in 1981. More importantly, hard currency sales fell an estimated 6 percent.

Volume of Sales. In 1981, roughly three-fifths of total Soviet oil exports were shipped to Communist countries, one-tenth to non-Communist soft currency countries, and the remainder to hard currency customers (table 1). Oil exports to soft currency customers amounted to 2.3 million b/d in 1981, most of it to East European clients. Among Moscow's remaining Communist customers, only Cuba and Yugoslavia are significant importers of Soviet oil. Of the non-Communist countries, Finland and India are the only buyers of significance.

In addition to direct exports, Moscow purchases small amounts of Middle East crude for transshipment to third countries on Soviet account. The USSR pays cash for these purchases, which have averaged between 80,000 and 100,000 b/d in recent years, or accepts them as payment in lieu of cash from the OPEC countries. The USSR, for example, accepts oil from Libya in partial repayment for past military equipment deliveries. In 1981, Iranian oil was lifted for delivery to India.

The Soviet Union's oil trade with hard currency customers is conducted under conditions set in international markets. It accordingly benefits when OPEC

Table 1 *Thousand b/d*

USSR: Selected Trade in Crude Petroleum and Petroleum Products, 1980-81 [a]

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	1980	1981
Gross exports	**3,266**	**3,261**
Soft currency countries	2,291	2,341
Communist countries	1,978	2,020
Eastern Europe	1,600	1,620
East Germany	380	380
Czechoslovakia	384	384
Poland	320	320
Bulgaria	300	300
Hungary	186	186
Romania	30	50
Other [b]	378	400
Non-Communist countries	313	321
Hard currency countries	975	920
OECD countries	942	869
Of which:		
France	168	162
Netherlands	145	161
Italy	138	134
West Germany	138	100
Switzerland	53	52
LDCs	33	51
Gross imports	**78**	**98**
Hard currency purchases	78	58
Iraq	26	0
Libya	40	40
Venezuela [c]	12	10
Other	0	8
Soft currency purchases from Iran	0	40
Net exports	**3,188**	**3,163**
Hard currency countries	897	862

[a] For an accounting of the volume of Soviet oil exports to all individual customers, see appendix B.

[b] Including Yugoslavia, which is not a member of the Warsaw Pact.

[c] Oil swap for delivery to Cuba.

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increases oil prices, and it is adversely affected when OPEC reduces prices. Because the USSR is a relatively small supplier to Western countries, it cannot do much by itself to influence the price of oil. The great majority of deliveries to the West are made under contracts signed between Western firms and Soyuznefteeksport (NAFTA), the Soviet foreign trade organization authorized to import and export oil. NAFTA has developed a broad clientele of state and private oil firms with which it deals on a long-term contractual basis. Although its headquarters is in Moscow, NAFTA conducts its trade through a string of subsidiaries that have been established in the more important West European countries. Spot market sales are normally small; Moscow ordinarily enters the spot market primarily to take advantage of short-term fluctuations.

The hard currency market for Soviet oil is concentrated in France, the Netherlands, Italy, and West Germany—these four countries bought more than 60 percent of total Soviet hard currency oil exports in both 1980 and 1981. Sales to the OECD countries as a group accounted for 95 percent of total hard currency deliveries in each of the years.

The total volume of Soviet oil deliveries to hard currency countries fell from 975,000 b/d in 1980 to an estimated 920,000 b/d in 1981. During the past three years, oil exports to OECD paid for in hard currency have declined by an average of 5 percent per year. Moscow's export performance in 1981 was especially poor from April to September, when shipments to hard currency OECD countries fell an average 200,000 b/d below the pace recorded in that period of 1979 and 1980.

Although the slide in sales last year is part of a volume trend dating back to 1978 when sales peaked at 1.1 million b/d, it hit the USSR especially hard because it occurred when grain import requirements were spiraling and world commodity prices were softening. Largely to alleviate this situation, Soviet planners apparently decided in late 1981 to increase

Table 2
USSR: Petroleum Trade With Hard Currency Countries

Million US $

	1980	1981
Exports	12,293	12,232
OECD countries	11,930	11,671
LDCs	363	561
Imports	879	730
Net exports	11,414	11,502

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sales of petroleum, especially oil products, to Western Europe, despite weakening demand and prices. During the fourth quarter of the year, the volume of deliveries to hard currency OECD customers was nearly 100,000 b/d higher than in the comparable period of either 1979 or 1980. 25X1

Hard Currency Earnings. Even though the volume of 1981 oil deliveries to hard currency customers was 6 percent lower than in 1980, the value fell only $60 million (table 2). The decline in sales volume was almost offset by favorable price trends. The average price of Soviet petroleum sold to hard currency OECD countries was 5.5 percent higher in 1981 than in 1980. The official sales price for OPEC crude oil averaged $30.87 per barrel in 1980 and $34.50 per barrel in 1981, while average product prices per barrel rose from $38.90 in 1980 to $39.60 in 1981. Spot market prices for crude oil and oil products also increased. A weakening in prices in the second and third quarters of 1981, however, coincided with the volume falloff and contributed to the effort to push sales in the fourth quarter. 25X1

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Table 3
USSR: Estimated Price of Oil Sold to Eastern Europe [a]

US $ per barrel

	1980			1981		
	Crude Oil	Oil Products	Crude/ Product Mix	Crude Oil	Oil Products	Crude/ Product Mix
World price	31.04	38.89	31.82 [b]	34.48	39.58	34.99 [b]
5-year average price	13.45	19.58	14.00	17.42	25.30	18.13
5-year average price as percent of world price	43.3	50.3	44.0	50.5	63.9	51.8

[a] Five-year average based on the world market price of the previous five years. All prices are calculated from f.o.b. Rotterdam spot market prices, as reported in the *International Energy Statistical Review*. For oil products, prices are weighted by volume of oil sold to hard currency OECD countries.
[b] Price based on the 90-10 mix of crude and product delivered to Eastern Europe; this compares with the 50-50 mix shipped to the West.

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[redacted]

Oil Sales to Soft Currency Customers

Unlike its trade with most Western countries, Moscow's trade with soft currency countries is conducted on a bilateral clearing account.[1] Under a rough sort of barter system, sales of individual commodities are set in negotiations designed to balance overall trade. The oil that the USSR agrees to deliver is not paid for in cash but in commodities which may or may not be valued in prices prevailing in world trade. Oil is bartered to the Communist countries under a formula that fixes each year's price at the average world price for the preceding five years. Because of the near tripling of OPEC prices between 1978 and 1981, this discount has become sizable. The East European CEMA member countries, for example, paid the USSR on the average only about $18 a barrel for their purchases in 1981, about half the world market price (table 3). In aggregate terms, this translates into an annual Soviet subsidy of $10 to $11 billion for the past few years. [redacted] 25X1

The Soviets price petroleum sold to their non-Communist soft currency customers at levels close if not equal to world market prices. Our calculations, which are based on estimated sales volume and values, suggest that Moscow received $34.30 a barrel for oil in 1981, a price only slightly below that charged to the OECD countries. [redacted] 25X1

Hard Currency Sales in 1982

Moscow should fare considerably better in 1982 than it did in 1981 in terms of hard currency oil export earnings. Indeed, a strong sales effort in the first half of 1982 combined with a traditional upswing that occurs in the second half of most years should give the USSR enough impetus to exceed last year's performance even if sales volume falls substantially from July to December. [redacted] 25X1

In the first half of 1982, a 5-percent price drop from the comparable 1981 period was more than offset by a 53-percent rise in the volume of sales to hard currency

[1] Our assumption that all trade with Eastern Europe is conducted on a soft currency basis is somewhat misleading. Romanian officials have stated, for example, that the oil Bucharest receives from the USSR is valued at world prices and settled in either hard currency or "hard goods"—those commodities salable in Western markets such as oil drilling pipe and nonferrous metal. Part of Hungary's bill is also settled by barter of "hard goods" valued at world prices and perhaps some straight hard currency payment. Although a lack of detailed information prevents us from estimating with any degree of accuracy the value of Soviet hard currency oil trade with Eastern Europe, we believe the totals are small. [redacted]

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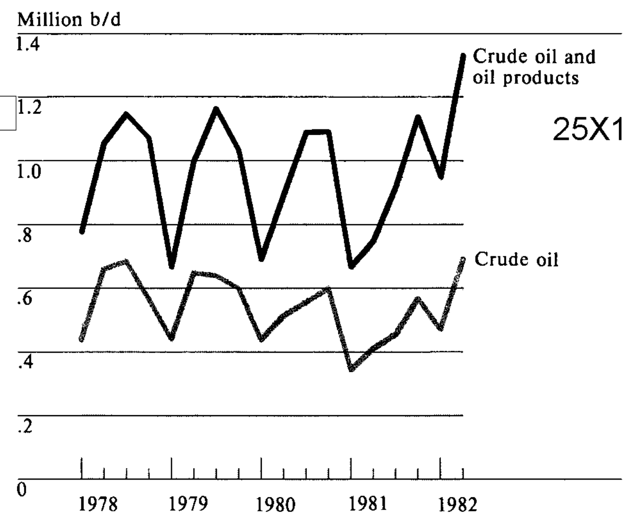
OECD countries (figure 2). Sales to these countries—which account for virtually all hard currency sales—rose to about 1,055,000 b/d, compared with 690,000 b/d in the comparable period in 1981 and 870,000 b/d for last year as a whole. The rise in 1982 hard currency oil exports that we anticipate would reverse a trend that saw exports to OECD countries for hard currency drop annually in the previous three years.

The 185,000 b/d increase (over the full-year-1981 level) in first-half-1982 deliveries to the hard currency OECD countries was the result of a decision to cut back on allocations to client states and to domestic customers. At least 100,000 b/d of the increase probably represented a diversion of oil exports from soft currency East European customers to hard currency countries. In late 1981, the USSR notified some of its Communist clients that deliveries would be cut back in 1982 because of the Polish crisis, the general hard currency problem, and the need to import grain. According to several government officials in Eastern Europe, deliveries to Hungary, Czechoslovakia, and East Germany were to be cut by slightly more than 100,000 b/d. (Polish trade data for the early months of 1982 suggest Poland will receive about the same quantity of oil it received last year.) This cut is equal to about 10 percent of the sum of Hungarian, Czechoslovak, and East German oil imports from the USSR and to about 6 percent of the 1981 purchases of all six East European countries. 25X1 the USSR told Czechoslovakia and East Germany that it would not reduce deliveries if payment for the affected amount were made in hard currency and at world market prices. Because trade with Eastern Europe is mostly on a barter basis, the addition to Soviet hard currency oil earnings would be the full price of the diverted oil—$1.1 billion at $30 per barrel or $1.3 billion at $35 per barrel.

The USSR has also applied pressure to Cuba, the largest non-European Communist importer of Soviet oil, to hold constant or reduce the level of oil imported in 1982. Some of this oil is shipped from Venezuela to Cuba on Soviet account under a quadrilateral swap agreement. In return, Moscow supplies one of Venezuela's West European customers. This agreement has been proceeding on a shipment-by-shipment basis since the 1980 expiration of the formal agreement.

Figure 2
USSR: Oil Exports to Hard Currency OECD Countries[a]



[a] Quarterly data.

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In addition to diversions from Communist countries, the Soviets shifted some oil from the domestic economy to export markets. Based on production and net exports, we estimate that the USSR used about 85,000 b/d less in the first half of 1982 than in 1981. Soviet planners have been trying to curb consumption of fuel in general and petroleum products in particular by holding the line on quarterly and monthly allocations. In some instances, supplies to enterprises have been reduced even though enterprise plans call for increased production.

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The decision to short the internal economy was made easier to the extent that economic growth has tapered off. Nonetheless, there have been reports of scattered petroleum shortages affecting industry, transportation, and power generation during the past year. Some production facilities reduced output because fuel oil deliveries were behind schedule. In one region, for example, reduced fuel allocations last January were running at about 50 percent of scheduled shipments. [redacted] 25X1

Several factors probably were at work in the formation of Soviet oil export policy the past year:

- In the fourth quarter of 1981 the USSR required a "quick fix" to correct a widening hard currency trade imbalance. Petroleum represented the major commodity that could be diverted on short notice from domestic consumers and soft currency export markets to hard currency sales. After the 1981 harvest it was also clear that increased revenues would be needed to pay for imports of grain, meat, and other agricultural goods.

- Higher export earnings would enable the USSR to restore its working balances in Western banks, which had fallen to unacceptably low levels, and to cut back its reliance on credits. During the first half of 1981, Soviet assets fell from a comfortable $8.6 billion (equal to more than three months' worth of commodity imports) to $3.5 billion (equal to less than two months' imports). The mid-1981 level relative to Soviet hard currency imports was the lowest for at least 10 years.

- In December—and at least through the first quarter of 1981—the Politburo could not be sure of the Western reaction to the imposition of martial law in Poland. It probably anticipated that the West would take some steps on the trade or financial front to show its displeasure over martial law.

- This uncertainty was reinforced during the first half of 1982 when the United States pressed its allies to agree on controlling the terms and volume of medium- and long-term lending to the USSR. Not until after the Versailles Summit could the Soviet Union be certain that credits would continue to be available for major development projects. [redacted]

Regardless of Moscow's motivations, increases in oil exports to the West went a long way toward easing the Soviet hard currency crunch. Largely because of higher petroleum earnings, the USSR slashed its hard currency trade deficit during the first six months of 1982 to $2.2 billion, compared with the $6 billion deficit posted during the first half of 1981. Two-thirds of the $4 billion turnaround resulted from higher oil exports to hard currency countries. The trade improvement, in turn, gave Moscow the financial flexibility to avoid substantial new borrowing or the sharp drawdown in assets that would have been required without the rise in oil sales. [redacted] 25X1

If the first-half oil export trend continues, hard currency oil earnings for the year would rise to about $14 billion, compared with last year's $12.2 billion (assuming the average 1982 price is the same as the first-half level). Alternatively, if the USSR believes it has already adjusted its trade accounts sufficiently and wishes to relieve the pressure on its economy and those of Eastern Europe, it might reduce the volume of exports of crude oil and petroleum production the second half of this year. In this case, the USSR could match last year's hard currency oil earnings by allowing export volume to drop from the 1.1 million b/d January-to-June rate to 865,000 b/d in the July-December period. [redacted] 25X1

The Longer Term Outlook

The improvement in the Soviet oil position in 1982 probably will not last long. We believe that the USSR will find it increasingly difficult to maintain the present level of hard currency petroleum deliveries during the next few years because domestic oil production is unlikely to keep pace with demand. Production of 12.19 billion b/d through September of this year is only 0.2 percent above the level in the comparable period of 1981. Planners will have to tread carefully in allocating oil to hard currency markets at the expense of both domestic consumption and deliveries to Eastern Europe. [redacted] 25X1

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Further Reductions in Sales to Eastern Europe. Oil freed by reducing deliveries to Eastern Europe could be retargeted to hard currency markets. Such cutbacks are Moscow's most promising means of adjusting to production problems simply because the available oil amounts to about 1.6 million b/d. We do not know how deeply the Soviets would be willing to cut deliveries to the region—reductions probably would be determined by the effect of decreased supplies on economic growth rates and questions of interfuel substitution. Moscow may argue that when its own economy is under strain its allies should shoulder a similar burden; it may parry complaints from East European leaders by offering to maintain deliveries at higher (but still concessionary) prices or perhaps with payment in convertible currency.

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Reduced Sales to Other Soft Currency Customers. Cutbacks in deliveries to other countries that do not pay in hard currency—Cuba, North Korea, Vietnam, Finland, India, and Turkey—would also permit the USSR to divert oil to the hard currency market. A decision to reduce oil sales to Moscow's other Communist customers would require calculations similar to those made for the Council for Mutual Economic Assistance (CEMA) customers in Eastern Europe—that is, how far deliveries could be scaled down without inflicting intolerable economic or political damage.

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A decision to reduce deliveries to non-Communist soft currency customers would take into account foreign policy goals, including maintaining good political relations with Finland, India, and the less developed countries (LDCs). Finland and India would be especially hurt by reduced sales because both rely on the USSR for a large proportion of their oil imports. Nonetheless, the internal difficulties caused by cutbacks to these countries would not affect Moscow's interests as directly as the dislocations caused by cuts to Eastern Europe.

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Buying OPEC Oil for Resale. The USSR might try to sell OPEC oil in the Western marketplace either for hard currency or barter for its equivalent value in goods and technology. In 1981 the USSR lifted 80,000 b/d from Libya and Iran for transshipment to third parties. Soviet liftings from Libya represent partial repayment for past military deliveries—payments which the Libyans, short of cash, could not otherwise make.

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Moscow also may see an opportunity in the Iran-Iraq war: an oil-for-arms deal might help both Tehran and Baghdad with their foreign exchange problems.

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Selling Products Instead of Crude. By increasing the proportion of products in total oil deliveries to the developed West, the USSR could increase revenues while maintaining the same sales volume. Moscow already directs a greater share of higher valued products to the West than to the other areas of the world; since 1978 it has increased the average annual share of products from 42 percent to 50 percent (see figure 3). In contrast, only 10 percent of recent exports to Eastern Europe consists of products. A senior Gosplan official told US officials last May that the USSR will continue to push shipments of refined products.

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Moscow, however, might have trouble carrying out this policy. The West's weak demand for heavy fuel oil—the oil product that the USSR has in large supply—will make it unprofitable to raise the share of fuel oil products in total petroleum sales. To raise the average price paid for Soviet crude and products together, this heavy fuel oil must be further refined to produce the middle distillates (gasoline and diesel fuel) that Western Europe wants. The USSR, however, does not now have enough cracking equipment to do this.

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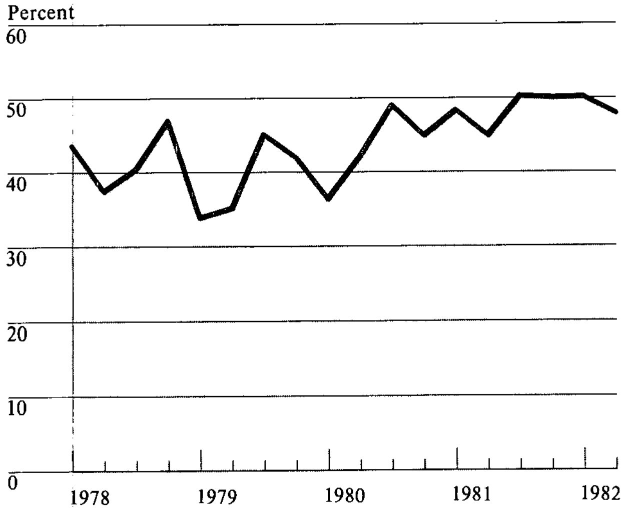
Figure 3
USSR: Oil Products as a Percent of Petroleum Exports to Hard Currency OECD Countries[a]



[a] Quarterly data.

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Even if the Soviets succeed in increasing the share of product sales to the West, the financial returns would be neither commensurate with the required investment nor sufficient to prevent a drop in total hard currency earnings from sales of petroleum. If Moscow could increase the share of products by another 10 percentage points (as it has from 1978), the added earnings would be only $100 million—compared with the $12.2 billion earned from hard currency oil sales in 1981. The impact of increasing oil product exports on the domestic economy could be considerable if most of these sales occurred in the middle distillate product range—products which are in high demand in the USSR and for which the Soviets, as noted, lack sufficient refinery capacity to expand production significantly.

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Appendix A

Estimating the Volume and Value of Soviet Oil Exports

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Vneshnyaya torgovlya, the official Soviet foreign trade handbook published annually, once provided considerable detail on both *volume* and *value* of oil sales, including an accounting of crude and oil products delivered to individual countries. Since the late 1960s, however, detailed statistical reporting of the oil trade has almost disappeared. In 1977, Moscow stopped distinguishing between crude oil and oil products and no longer published even overall statistics on the *volume* of the petroleum trade. Although *value* data are still published for total exports and exports to many countries, the sales to certain countries must be reconstructed from partner country statistics [redacted] because oil exports are buried in residual categories in the trade handbook. For example, the 1981 trade handbook reports oil receipts of only $221 million from sales to LDCs that pay in hard currency for imports from the Soviet Union, an amount equal to only about 40 percent of what we estimate are actual earnings. [redacted]

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The complete absence of Soviet data on the *volume* of petroleum exports—either globally or to individual countries—poses the biggest problem for trade analysis. This omission means that a variety of sources must be used to calculate oil export volumes. The most comprehensive source for sales to developed countries is *Quarterly Oil Statistics*, published by the International Energy Agency, an OECD affiliate. The OECD series tabulates traded volumes of crude oil and four types of oil products for each OECD country. Except for exports to Belgium and crude oil deliveries to Turkey, this source is comprehensive for 1980 and 1981. (Belgium's petroleum imports from the USSR can be identified from Belgian statistics, and other reporting is available on Turkey's crude oil imports.) The OECD series also provides consistent volume data back to 1977 that allow quarterly and annual comparisons and comparisons between crude oil and oil product sales. The only drawback is that the series does not provide dollar *values* corresponding to the reported quantity data that we can then compare to Soviet reported values. [redacted]

[redacted]

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Appendix B

USSR: Trade in Crude Petroleum and Petroleum Products [a]

Thousand b/d

	1980	1981
Gross Exports	**3,266**	**3,261**
Soft currency countries	2,291	2,341
Communist	1,978	2,020
Eastern Europe	1,600	1,620
East Germany	380	380
Czechoslovakia	384	384
Poland	320	320
Bulgaria	300	300
Hungary	186	186
Romania	30	50
Yugoslavia	105	102
Cuba	198	215
Vietnam	28	35
North Korea	20	20
Mongolia	16	16
Afghanistan	7	8
Others	4	4
Non-Communist	313	321
Finland	194	198
India	72	100
Turkey	30	12
Morocco	12	9
Others	5	2
Hard currency countries	975	920
OECD	942	869
France	168	162
Netherlands	145	161
Italy	138	134
West Germany	138	100
Switzerland	53	52
OECD (continued)		
Belgium	85	42
Austria	30	34
Greece	25	33
United Kingdom	24	31
Sweden	47	26
Spain	27	26
Denmark	26	18
Portugal	10	13
Japan	11	11
Norway	4	10
Iceland	7	6
United States	1	6
Ireland	3	4
LDCs	33	51
Ethiopia	14	18
Brazil	8	18
Others	11	15
Imports	**78**	**98**
Soft currency countries	0	40
Iran	0	40
Hard currency countries	78	58
Iraq	26	0
Libya	40	40
Venezuela [b]	12	10
Others	0	8
Net exports	**3,188**	**3,163**
Soft currency	2,291	2,301
Hard currency	897	862

[a] Sources: The data for *OECD* members are derived from the *Quarterly Oil Statistics* series published by the International Energy Agency, an OECD affiliate. Information from official Western [redacted] sources has been used to fill gaps in OECD reporting—for example, Belgium's petroleum imports and Turkey's crude oil imports from the USSR. Because OECD defines imports as goods that cross the political rather then the customs boundary of a country, the data presented differ in some cases from data published by the individual OECD countries. The data for *CEMA* countries and the major *LDCs* are derived from official statistics [redacted]

[b] Oil swap for delivery to Cuba.

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